

WHAT IS CLAIMED IS:

1. A thermal processing apparatus heating a substrate by irradiating said substrate with light, comprising:

5 a chamber, comprising a chamber window transmitting light on its upper portion, for storing and holding said substrate therein;

a lamp house, storing a lamp and comprising an irradiation window passing light emitted from said lamp therethrough on its lower portion, fitted to said chamber in an openable/closable manner; and

10 a locking mechanism fixing said chamber and said lamp house to a closed state for opposing said chamber window and said irradiation window to each other,

for shielding said irradiation window by inserting a shielding plate in said closed state thereby releasing said locking mechanism and allowing opening of said chamber and said lamp house.

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2. The thermal processing apparatus according to claim 1, wherein said shielding plate is opaque with respect to said light emitted from said lamp.

3. The thermal processing apparatus according to claim 2, wherein

20 said lamp is a xenon flash lamp.

4. A thermal processing apparatus heating a substrate by irradiating said substrate with light, comprising:

a chamber, comprising a chamber window transmitting light on its upper
25 portion, for storing and holding said substrate therein;

a lamp house, storing a lamp and comprising an irradiation window passing light emitted from said lamp therethrough on its lower portion, fitted to said chamber in an openable/closable manner; and

a locking mechanism fixing said chamber and said lamp house to a closed state
5 for opposing said chamber window and said irradiation window to each other,

for covering said locking mechanism with a shielding plate drawn out in said closed state while shielding said irradiation window by inserting said shielding plate thereby allowing release of said locking mechanism and enabling opening of said chamber and said lamp house.

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5. The thermal processing apparatus according to claim 4, wherein
said shielding plate is opaque with respect to said light emitted from said lamp.

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6. The thermal processing apparatus according to claim 5, wherein
said lamp is a xenon flash lamp.